

## **Sedgwick County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/28/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 36 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Sedgwick County economy.<sup>1</sup>

These 36 sectors have a total direct output of approximately \$1.97 billion and support 6,167.2 jobs in Sedgwick County. Running the model for all 36 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Sedgwick County Economy								
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional	Output <sup>5</sup>	Output % of Gross Regional Product		
				Product <sup>4</sup>		Troduct		
Direct Effect	6,167.2	1.94%	\$451,253,272	1.70%	\$1,967,633,081	7.40%		
Indirect Effect	2,222.0	0.70%	\$222,728,267	0.84%	\$401,321,826	1.51%		
Induced Effect	2,228.1	0.70%	\$162,670,116	0.61%	\$284,586,582	1.07%		
Total Effect	10,617.4	3.34%	\$836,651,654	3.15%	\$2,653,541,489	9.98%		

As shown in the above table, agriculture, food, and food processing sectors support 10,617.4 jobs, or 3.34% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$2.65 billion, roughly 9.98% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 36 agriculture, food, and food processing sectors is approximately \$836.7 million, or 3.15% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 3.15% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

 $<sup>5 \</sup>text{ Output} = \text{intermediate inputs} + \text{value added}.$ 

In the top ten agriculture, food, and food processing sectors by employment, the landscape and horticulture services sector is the top employer with **1,429.9 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Sedgwick County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Landscape and horticultural services	1,429.9	\$86,716,364		
Meat processed from carcasses	1,218.6	\$726,863,721		
Veterinary services	593.7	\$57,937,808		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	475.2	\$30,838,432		
All other industrial machinery manufacturing	448.7	\$121,809,358		
Wholesale trade	409.3	\$102,472,011		
Bread and bakery product, except frozen, manufacturing	375.6	\$43,951,252		
Grain farming	373.7	\$78,449,586		
All other crop farming	212.0	\$9,097,860		
Real estate	193.8	\$39,574,670		

The meat processed from carcasses sector directly contributes approximately \$726.9 million to the Sedgwick County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Meat processed from carcasses	1,218.6	\$726,863,721		
Flour milling	156.9	\$236,521,257		
All other industrial machinery manufacturing	448.7	\$121,809,358		
Bottled and canned soft drinks & water	146.6	\$113,776,094		
Wholesale trade	409.3	\$102,472,011		
Landscape and horticultural services	1,429.9	\$86,716,364		
Fluid milk manufacturing	103.3	\$85,985,836		
Grain farming	373.7	\$78,449,586		
Pesticide and other agricultural chemical manufacturing	58.6	\$78,317,551		
Animal, except poultry, slaughtering	84.5	\$69,122,682		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Sedgwick County economy.

All Agriculture, Food, and Food Processing Sect		
Sector	Total Employment	Total Output
Oilseed farming	42.6	\$26,353,183.75
Grain farming	373.7	\$78,449,584.96
Vegetable and melon farming	0.6	\$144,794.78
Fruit farming	2.9	\$356,805.15
Tree nut farming	0.02	\$5,400.12
Greenhouse, nursery, and floriculture production	13.7	\$3,062,179.80
Cotton farming	0.2	\$71,259.84
All other crop farming	212.0	\$9,097,859.38
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	475.2	\$30,838,430.40
Dairy cattle and milk production	20.5	\$9,109,430.31
Poultry and egg production	0.4	\$348,023.06
Animal production, except cattle and poultry and eggs	19.9	\$1,636,350.51
Commercial logging	3.4	\$125,413.66
Flour milling	156.9	\$236,521,270.75
Confectionery manufacturing from purchased chocolate	14.8	\$4,487,349.51
Canned fruits and vegetables manufacturing	35.1	\$16,672,878.27
Dehydrated food products manufacturing	58.8	\$28,937,652.59
Fluid milk manufacturing	103.3	\$85,985,832.21
Animal, except poultry, slaughtering	84.5	\$69,122,680.66
Meat processed from carcasses	1,218.6	\$726,863,708.50
Bread and bakery product, except frozen, manufacturing	375.6	\$43,951,251.98
Frozen cakes and other pastries manufacturing	19.8	\$3,054,145.81
Dry pasta, mixes, and dough manufacturing	24.9	\$15,379,264.83
Tortilla manufacturing	6.3	\$1,155,806.42
Coffee and tea manufacturing	25.7	\$15,642,602.92
Spice and extract manufacturing	36.1	\$19,127,874.37
All other food manufacturing	24.4	\$8,779,547.69
Bottled and canned soft drinks & water	146.6	\$113,776,100.16
Breweries	33.1	\$25,114,936.83
Pesticide and other agricultural chemical manufacturing	58.6	\$78,317,550.66
Farm machinery and equipment manufacturing	42.6	\$24,605,424.88
Lawn and garden equipment manufacturing	16.4	\$8,663,133.62
Food product machinery manufacturing	47.7	\$15,411,821.37
All other industrial machinery manufacturing	448.7	\$121,809,356.69
Veterinary services	593.7	\$57,937,805.18
Landscape and horticultural services	1,429.9	\$86,716,362.00

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Sedgwick County, the retail sector was omitted.